

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
SELF- FUNDED HEALTHCARE**

September 17, 1999

This Policy is effective immediately upon adoption. No previous Self-Funded Healthcare Policy exists.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Self-Funded Healthcare Fund ("the Fund"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of investments.

II. STRATEGIC OBJECTIVE

A. Achieving the highest total rate of return, consistent with the liquidity and capital preservation requirements is the strategic objective of the Fund. Currently, the System funds four health plans from Self-Funded Health Care:

1. CalPERS Care (Basic);
2. CalPERS Care (Supplemental);
3. CalPERS Choice (Basic); and
4. CalPERS Choice (Supplemental).

The System shall manage the Fund's investments to exceed the return of the State Treasurer's Surplus Money Investment Fund (SMIF) by thirty basis points while maintaining a high level of diversification.

B. The Fund shall be managed to accomplish the following:

Provide capital preservation;

1. Provide sufficient liquidity to meet all cash needs; and

Enhance the Fund's total return.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the Self-funded Health Care Fund to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the CalPERS Investment Committee.
 - 2. Developing and updating a procedures manual outlining the Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Reporting all violations in accordance with the violation reporting Policy.
 - 5. Purchasing only securities outlined in the Policy.
 - 6. Reporting to the Investment Committee at least quarterly on relative performance.
- C. The **Consultant** is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, the performance relative to the benchmark and Policy guidelines.

IV. INVESTMENT APPROACHES AND PARAMETERS

A. Philosophy and Approach

The investment approach is to identify opportunities across bond market sectors and invest where risks are both understood and manageable while providing sufficient liquidity and preservation of capital. The portfolio may target a slightly longer duration than the benchmark, as well as allocate a greater percentage of assets to mortgage-backed and asset-backed securities than the SMIF.

Mortgage-backed and asset-backed securities have higher risk adjusted return expectations than securities such as U.S. Treasuries, Agencies or cash equivalents. However, a certain portion of the portfolio shall be invested in U.S. Treasuries, Agencies or cash equivalents to meet any unforeseen liquidity needs. The portfolio may target a slightly longer duration than the SMIF, given that studies of empirical evidence over the past 25 years have shown that duration extensions up to one year increase expected returns at the front end of the yield curve.

B. Specific Parameters

The System shall manage the following major categories of fixed income risk:

1. **Interest rate risk** is the price volatility produced by changes in the overall level of interest rates as measured by an option-adjusted duration. The duration shall be maintained at less than or equal to three years.
2. **Yield curve risk** refers to price changes triggered by the changing slope of the yield curve. Yield curve risk shall be managed in a controlled, disciplined fashion by employing break-even and economic analyses.
3. **Convexity risk** is the downside risk of an equal move up or down in interest rates causing a greater price loss than price gain. Convexity shall be managed using option adjusted and scenario analyses.
4. **Sector risk** is the risk of holding sectors that are in different proportions than the SMIF. Based on the economic outlook, historical factors, and break-even analysis, Staff shall estimate the impact on various sector spreads and make allocations accordingly.

a. Permissible Ranges of Sectors

Each sector has a range by which actual allocations can fluctuate.

TOTAL FIXED INCOME PORTFOLIO WEIGHTINGS

Sector	Permissible Range
U.S. Treasury & Government Sponsored	0-100%
Corporates	0-75
Mortgages	0-75
Asset-Backed Securities	0-50
Sovereign	0-20
Cash Equivalents	0-75

5. **Credit risk** is the uncertainty surrounding the borrower's ability to repay its obligations. The management of credit risk shall actively occur through rigorous credit analysis and issue diversification. A violation in the guidelines shall require an immediate sale unless the Senior Principal Investment Officer of Fixed Income determines that an immediate sale potentially reduces the total return to the System. The following is the minimum credit quality for each of the sectors.

a. **Treasury & Government Sponsored**

The minimum credit quality shall be AAA rated.

b. **Corporates**

The minimum credit quality of corporate issues is investment grade (at least Baa3 or P2 by Moody's or BBB- or A2 by Standard and Poor's). This sector includes domestic and dollar denominated public utilities, transportation, industrials, and bank and finance companies. The review of all corporate issues shall occur annually by the internal research staff.

c. **Mortgages**

The minimum credit quality of mortgages is A rated.

d. **Asset Backed Securities**

The minimum credit quality of asset-backed securities is A rated.

e. **Sovereign**

The minimum credit quality of the sovereign bonds is investment grade. All securities shall be dollar denominated.

f. **Cash Equivalents**

The minimum credit quality of cash equivalents is A2/P2.

6. **Structure risk** arises from the options implicit in bonds (like callable and optional sinking fund bonds) or cash flows that differ from expectations. Managing structure risk shall take place using option adjusted and scenario analyses as well as using prepayment variability stress testing.

7. **Reinvestment risk** is the uncertain future yield opportunities to invest funds that become available due to call, maturity, or coupon payments. Reinvestment risk shall be managed through call risk and cash flow analysis.
8. **Liquidity risk** is the ease with which an issue or specified amount can be sold at or near prevailing market prices. This is a primary consideration in managing the portfolio and shall be pursued in a prudent manner.

C. Restrictions

1. Investments in a single corporate issuer shall not exceed 5% of the **total** fixed income portfolio over the holding period for such investment. For AAA rated asset-backed and mortgage-backed securities, each separate trust (pool of assets) is defined as a separate issuer and shall not exceed 20% of the total fixed income portfolio.
2. The portfolio shall only contain investment grade securities.
3. The maximum maturity of a security shall be five years, or if it is an amortizing security, the maximum weighted-average life shall be five years using conservative prepayment assumptions.
4. All sectors must be within the permissible ranges specified in Part V. B. 4. a. of this Policy.
5. Purchases of non-dollar denominated securities are prohibited.
6. Derivatives (futures and options), and the use of leverage are prohibited.

D. Permissible Securities

1. Treasury and Government Agencies
2. Publicly Traded Corporate Bonds including bonds under Rule 144A
3. Publicly Traded Mortgage-Backed Securities, including CMOs/REMICs whose deliverable instrument or underlying collateral is a U.S. mortgage-backed security
4. Asset-Backed Securities
5. Yankee bonds
6. Cash Equivalents

V. BENCHMARK

The benchmark shall be the State Treasurer's SMIF plus thirty basis points.

VI. GENERAL

- A. This Policy contains a Glossary of Terms in Section VII of this document.
- B. Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations shall be on a market value basis.

VII. GLOSSARY OF TERMS

Asset-Backed Securities - Fixed income securities collateralized by assets that are not mortgage loans. These securities are commonly backed by automobile loans or leases, credit card receivables or equipment.

Basis Point - One one-hundredth of one percent of yield (one basis point = .0001). It is the smallest measure used in quoting yields on bonds and notes.

Break-even analysis - Uses results from scenario analysis. Since all projections should be viewed as risky, the sensitivity of the projected return is evaluated to adverse market movements. The break-even analysis calculates the required movement to reduce the sector or portfolio returns to a specified level at some horizon. This analysis creates a form of risk/return ratio. The higher the break-even value the more the cushion against an adverse movement in rates.

Call risk analysis - Examines the portfolio's callable securities and estimates the amount of principal returned for a given drop in interest rates.

Cash Equivalents - Includes money market instruments, obligations of the U.S. Government and its agencies, commercial paper, bank time deposits, certificates of deposit, banker's acceptances, repurchase agreements, and money market funds as defined under SEC Regulation 270.2a-7.

Convexity - The price change from a move in interest rates that can not be explained by duration only. Positive convexity (price rises more than expected and falls less) comes at a cost (lower yield) and negative convexity (price rises less than expected and falls more) usually comes with more yield.

Credit rating - Defined as the measure of financial solvency or debt repayment ability of the obligor, assigned by a nationally recognized credit rating company. In the case of split ratings, the higher rating of either Moody's or Standard & Poor's shall apply.

Duration - A measure of price sensitivity to interest rate changes. Duration is the percentage move in price anticipated given a 100 basis point (1 percent) move in interest rates.

Derivative - A financial instrument whose value depends on the values of other more basic underlying securities.

Economic analysis - The process that looks at reference points for indications regarding what to look for and what can be considered significant events in the economy so one can understand relationships among complex and often seemingly unrelated events. This analysis is used in making decisions regarding duration and sector weightings.

A Treasury Bond **Futures Contract** - An agreement between a buyer and a seller to trade a long-term treasury bond at a future date at a price that is set today.

Historical factors - A review of past relationships and the environment associated with them to assess the relative investment potential of the current market conditions and relationships.

Investment grade bond ratings - A minimum credit rating of Baa3 by Moody's Investor Service (Moody's) or BBB- for Standard and Poor's Corporation (S & P). Investment grade ratings apply to issuers whose financial risk is relatively low and the probability of future payment relatively high.

Leverage - The ability to create a more pronounced price effect on a security than normal.

Money Market Funds - Defined under SEC Regulation 270.2a-7 are funds subject to maturity, quality, diversification, and other standards. Although not a description of the rule in its entirety, following are the main points:

1. No more than 5% of the total assets may be invested in the securities of a single issuer.
2. Investment is limited to securities receiving at least the second highest rating from the nationally recognized statistical research organizations.
 - a. Investment in first tier securities is considered the highest rating. First tier securities are rated either A1/P1 or A1+/P1.
 - b. Investment in second tier securities is limited to 5% of fund assets. Second tier securities are rated A2/P2, A2/P1 or A1/P2.
3. Maturity for fixed-rate instruments is limited to 397 calendar days. The maturity of floating rate instruments is the longer of the period

remaining until the next interest rate readjustment or the date on which principal can be recovered on demand.

Mortgage-Backed Security (MBS) - A term generally used to describe the securitized mortgage market. MBS are broken down into five types of securities:

1. Mortgage pass-through
2. Mortgage-backed bond
3. Collateralized mortgage obligation (CMO)
4. Commercial mortgage-backed securities (CMBS)
5. Stripped mortgage-backed bonds

Mortgage pass-throughs are pooled loans typically issued by Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA), and Federal Home Loan Mortgage Corporation (FHLMC).

Mortgage-backed bonds have mortgage loans as collateral, but the term and interest payments are fixed.

CMOs are securities backed by a pool of pass-through mortgages. The pools are either agency (GNMA, FNMA, or FHLMC) or non-agency. The non-agency pools are typically not eligible for agency status because the loans are too large or do not meet agencies' underwriting guidelines. CMOs have bond classes (or tranches) of varying maturities and prepayment risks.

CMBS are securities backed by commercial, mortgage whole loans. The whole loans are generally secured by first liens on the underlying real estate.

Stripped mortgage-backed securities have the principal and interest distribution altered from a pro rata distribution to an unequal distribution.

Option on a Fixed Income Security - The right or privilege of either buying (call option) or selling (put option) a designated amount of a particular fixed income security, or class of securities, during a time period ending on the expiration date of the option.

Option Adjusted Analysis - A method that strips out the options inherent in the securities like callable bonds and mortgage-backed securities so comparisons with other security types such as non-callable bonds can be made in a framework that is consistent.

Prepayment Variability Analysis - A method that stress tests CMOs by varying prepayment assumptions to understand and anticipate how the structure changes in a constantly fluctuating interest rate environment.

Scenario Analysis - Projects returns over a number of changing situations (like interest rates, curve twists, spreads, etc.) and weighs each situation to arrive at an average expected return. This process allows comparisons to varying types of securities and portfolios.

Sovereign - A security issued by a foreign government or government sponsored agency.

Yankee Bonds - Securities issued in the domestic market by foreign borrowers.